

Lesson 3: Program Requirements – NuMenus and Assisted NuMenus

Lesson 3

Program Requirements – NuMenus
and Assisted NuMenus

Slide 1

Lunch Menu A

- Hamburger
- Lettuce, Tomato, Onion
- Potato Salad
- Watermelon Wedge

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Lunch Menu B

- Chicken Tostada Salad
- Candy-coated Popcorn
- Milk

Slide 3

Breakfast Menu C

- Juice
- Cereal
- Milk

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Overview

NuMenus and Assisted NuMenus are two of the three menu planning options in the USDA *School Meals Initiative for Healthy Children*. The other is Food Based Menus, which is based on the food components and the quantity of items offered.

All of the menu planning systems plan menus using foods. The difference is that with NuMenus and Assisted NuMenus, any foods in any quantities may be used to meet the nutrition goals, unlike Food Based Menus, where foods from specific food groups and in specific quantities must be offered.

Notes

1 Interest Building Strategy/Set

Show menus that do or do not meet program requirements. Ask if students can determine which do and do not. They will be able to by the end of the lesson. Do not go into detail at this point.

2 Review Competencies

3 Purpose

Our goal is to plan menus that meet the nutritional requirements of children. NuMenus and Assisted NuMenus menu planning systems will allow you to plan a menu with immediate feedback on how well you are meeting those requirements. The flexibility of NuMenus and Assisted NuMenus allows you to create menus that meet the needs of your operation and your students, but still meet the nutritional requirements of children.

4 Transfer

There are specific program requirements for NuMenus and Assisted NuMenus, just as there were for the traditional meal pattern. The requirements regarding fluid milk as a beverage and foods of minimal nutritional value remain the same. We will study the NuMenus and Assisted NuMenus program requirements, reviewing those that are familiar and learning the important new program requirements.

Meet Nutrition Goals

The goal of all three menu planning systems is to meet the nutrition goals:

USDA School Meals Initiative for Healthy Children *Nutrition Goals*

- Recommended Dietary Allowances
 - 1/4 RDA for Breakfast
 - 1/3 RDA for Lunch
- Calorie Goals
 - Age appropriate
- Dietary Guidelines for Americans
 - Balanced nutrient content

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School food authorities may select any of the three menu planning systems as their method to promote the health of the nation's school children.

Nutrient Analysis

With NuMenus, the school will conduct a nutrient analysis of the menus. With Assisted NuMenus, an outside consultant will conduct the nutrient analysis. During state agency reviews, a check will be made to ensure that the analysis is being done accurately. With Food Based Menus, the state agency will conduct the analysis during its review.

Flexibility

The traditional meal pattern has been successful in providing adequate calories and most nutrients. It did not, however, have quantitative limits for total fat and saturated fat, or encourage an increase in complex carbohydrates and dietary fiber. NuMenus and Assisted NuMenus allow menu planners the flexibility of breaking away from the traditional meal pattern and using a variety of foods in any quantity to improve the nutritional quality of the meal. Only fluid milk is required.

The increased flexibility of the NuMenus system is designed to give menu planners a wider array of options when making changes in their menus, yet the ultimate goal is the same as for Food Based Menus: to maintain the calories and nutrients while encouraging lowfat options that will better meet the nutritional needs.

NuMenus and Assisted NuMenus

NuMenus is a flexible new menu planning system that allows menu planners to break away from tradition and plan innovative and appealing menus for students. Many of the

Notes

4 Transfer

The Nutrient Standards are the yardstick to measure success. In the past, our yardstick was the traditional menu pattern. With NuMenus and Assisted NuMenus we will no longer measure success by our ability to provide certain food components in specified quantities. We will measure success by our ability to provide the required nutrients and dietary components. Even Food Based Menus which will still use certain food components in specified quantities will have as its ultimate goal the meeting of the Nutrient Standards. One thing that is the same is that we have different standards for different age and grade groups.

Review the key points for NuMenus.

old rules and regulations do not apply to NuMenus and Assisted NuMenus, but there are many new ones to learn.

Key Points
NuMenus

- Nutrient Standards
- Weekly averages
- Weighted Nutrient Analysis
- Combined breakfast and lunch

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Nutrient Standards

Peanuts



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Definition

A Nutrient Standard is the required level of calories and nutrients for a specific age group.

What is a Nutrient Standard?

The required level of calories and nutrients for a specific grade or age group is a Nutrient Standard.

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The Nutrient Standards are set for the three menu planning systems – NuMenus, Assisted NuMenus, and the Food Based Menus – based on the required level of calories, nutrients and dietary components for a specific age or grade group. Planned and offered breakfast and/or lunch menus averaged over a week should meet the Nutrient Standard of the age or grade group for which they are intended. Meeting these standards is the goal for all three menu planning systems.

Calories and Nutrients in the Standards

Standards are set for:

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Notes

5 Instruction

Activity

Appendix B: Nutrients

Review with a partner, then try to list the nutrients and dietary components:

1) in the Nutrient Standards and

2) the others to be analyzed.

Calories and Nutrients in Nutrient Standards

- Calories
- \leq 30% calories from fat
- $<$ 10% calories from saturated fat
- Protein
- Calcium
- Iron
- Vitamin A
- Vitamin C

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Foods containing these nutrients typically contain the other essential nutrients not specified in the Nutrient Standards.

Other Nutrients and Dietary Components Analyzed

Cholesterol	Dietary fiber
Sodium	Carbohydrate

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Other nutrients and dietary components that will be analyzed are carbohydrate, cholesterol, sodium and dietary fiber. While there are no quantity standards set for these dietary components, except for carbohydrate they must be included in the analysis. They will be monitored over time to check on the implementation of the Dietary Guidelines:

1. Is the carbohydrate level going up?
2. Are cholesterol and sodium levels going down?
3. Is the dietary fiber level going up?

Establishment of the Nutrient Standards

The Nutrient Standards for healthy school meals were established for all three of the menu planning systems by weighting and averaging the RDA for different groups of children. The standards are set using the RDA because they are considered to be the best estimate of how much of a nutrient intake is required to adequately meet the known nutrient needs of practically all healthy people for these reasons:

Refer to Appendix A: Recommended Dietary Allowances.

CHO analysis is a quality control factor to assist the planner in determining the source of calories in the menu. Approved software automatically gives this analysis. Show 1-2, Appendix C: Standard RDA Data Set. Point out that where separate requirements for females and males are listed, both were averaged into the Nutrient Standard. Point out the chart in Appendix D: Determining Nutrient Standards.

Recommended Dietary Allowances

- Set by a committee selected by the National Academy of Science and approved by National Research Council
- Based on available scientific evidence and revised periodically
- Reexamined by a new committee for each revision
- Set as recommendations with a margin of safety, not requirements
- Set for a healthy person not under stress of illness

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The RDA are designed for many uses, including use as guidelines for menu planners to aid in evaluating and planning diets for groups of people such as children. While the RDA can be met by eating a variety of foods with careful planning, this is difficult to achieve on a daily basis. The time frame varies for each nutrient. However, for most nutrients, the RDA encompasses average intakes over at least three days.

Notes

Age and Grade Groups

The Nutrient Standards for lunch and breakfast are set, at a minimum, for these grade levels:

Lunch required grade groups

- Preschool
- Grades K-6
- Grades 7-12
- Plus an optional standard for grades K-3

Breakfast required grade groups

- Preschool
- Grades K-12
- Plus an optional standard for grades 7-12.

Required Grade Nutrient Standards - Breakfast

Minimum Calories and Nutrient Levels for School Breakfast (school week averages)			
	Pre-school	Grades K-12	Option Grades 7-12
Energy Allowances (calories)	388	554	618
Total fat (g) ³	13 ¹	18 ¹	21 ¹
Total saturated fat (g) ³	4 ²	6 ²	7 ²
Protein (g)	5	10	12
Calcium (mg)	200	257	300
Iron (mg)	2.5	3.0	3.4
Vitamin A (RE)	113	197	225
Vitamin C (mg)	11	13	14

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on actual level of calories offered.

Notes

Point out that there is no RDA for fat or saturated fat, but it is helpful to monitor the grams of fat and saturated fat. The actual grams will vary depending on the calorie level. Show T-3, Total Fat Goal for Grades K-6, Lunch and T-4, Saturated Fat Goal for Grades K-6, Lunch.

Activity: Appendix E: Grams of Fat Using T-5, do the calculations together as a class.

Close by showing T-6, Fat Goals.

See Appendix K for larger charts.

Required Grade Nutrient Standards - Lunch

Minimum Calorie and Nutrient Levels for School Lunch (school week averages)				
	Pre-School	Grades K-6	Grades 7-12	Grades K-3 Option
Energy Allowances (calories)	517	664	825	633
Total fat (g) ³	17 ¹	22 ¹	28 ¹	21 ¹
Total saturated fat (g) ³	6 ²	7 ²	9 ²	7 ²
Protein (g)	7	10	16	9
Calcium (mg)	267	286	400	267
Iron (mg)	3.3	3.5	4.5	3.3
Vitamin A (RE)	150	224	300	200
Vitamin C (mg)	14	15	18	15

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on the actual level of calories offered.

The calorie and nutrient needs of children vary by their sex, age, size, and activity level. The calorie standards for breakfast and lunch are estimates of the minimum energy need. But some children, especially older males, may require considerably more than the minimum. Children who are large for their age or more active also need more calories.

Menu planners should adjust the amounts of foods served to provide for the calorie needs of all children.

Optional Age Groups

For NuMenus, schools have the option to provide the calorie and nutrient levels for school lunches and breakfasts for the age groups below:

Optional age groups

- Ages 3-6
- Ages 7-10
- Ages 11-13
- Ages 14-17

Using these age groups allows the menu planner to develop menus that are more accurately targeted to the nutritional needs of children.

Custom age groups

Menu planners may also develop their own customized groups corresponding to the age groups in their school. This is the recommended method, as it most accurately reflects

Notes

the nutrient needs of the children. Customized groupings may span all ages.

Optional Age Nutrient Standards for NuMenus - Breakfast

Minimum Calorie and Nutrient Levels for School Breakfast (school week averages for age groups)				
Nutrients and energy allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and older
Energy Allowances/Calories	419	500	588	625
Total Fat (g) ³	14 ¹	17 ¹	20 ¹	21 ¹
Saturated Fat (g) ³	5 ²	6 ²	7 ²	7 ²
RDA for protein (g)	5.50	7.00	11.25	12.50
RDA for calcium (mg)	200	200	300	300
RDA for Iron (mg)	2.5	2.5	3.4	3.4
RDA for Vitamin A (RE)	119	175	225	225
RDA for Vitamin C (mg)	11.00	11.25	12.50	14.40

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on the actual level of calories offered.

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Optional Age Nutrient Standards for NuMenus - Lunch

Minimum Calorie and Nutrient Levels for School Lunch (school week averages for age groups)				
Nutrients and energy allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and older
Energy Allowances/Calories	558	667	783	846
Total Fat (g) ³	19 ¹	22 ¹	26 ¹	28 ¹
Saturated Fat (g) ³	6 ²	7 ²	9 ²	9 ²
RDA for Protein (g)	7.3	9.3	15.0	16.7
RDA for calcium (mg)	267	267	400	400
RDA for Iron (mg)	2.5	2.5	3.4	3.4
RDA for Vitamin A (RE)	158	233	300	300
RDA for Vitamin C (mg)	14.6	15.0	16.7	19.2

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on the actual level of calories offered.

Selecting the Right Nutrient Standard

Not all schools' grade structures will match the Nutrient Standard grade or age groups. Menu planners must be able to select or create Nutrient Standards when planning NuMenus, which are based on their schools' grade or age structure.

If only one age or grade is outside the established levels, a school or group of schools may use the Nutrient Standard levels for the majority of children regardless of the Nutrient Standard option selected. However, when more than one grade or age is outside of the established levels, the menu planner should use two of the required groups or develop a customized age group.

NuMenus

If Age or Grade Groupings Differ:

- Use two standards or
- Create a new age standard or
- If only one age or grade is outside, use majority standard

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Required grade groups

For example, when using the required grade groups chart, if there is more than one grade beyond grade 6 or below grade 7, two grade groups for lunch should be used.

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See Appendix L for larger charts.

Approved USDA software will allow for grade or age group standards with Appendix F, Selecting Nutrient Standards

Using overhead transparencies and the activity sheet in Appendix F, lead the group through a discussion of factors to consider when deciding how to pick the appropriate grade or age group Nutrient Standard for lunch for NuMenus and when it would be best to modify the age grouping to have a custom Nutrient Standard.

See Appendix G for an age to grade comparison chart.

Show T-7, Selecting the Right Nutrient Standard.

Grade K-8 or grade 5-8 schools should have at least two grade groups for menu planning. Grade K-7 or grade 6-9 schools, however, could include the one grade outside the group in the predominant grades K-6 and grades 7-12 groups, respectively.

If the menu planner is planning centralized menus for several schools with grades within the K-6 range, even though the schools have varying age or grade groups, all of the menus may be planned for grades K-6 Nutrient Standard rather than customizing a standard for each school.

Optional age groups

For schools using the age grouping chart for NuMenus, the groups are adjusted by the menu planners by creating additional Nutrient Standards for other age categories by weighting, combining, and/or averaging the RDA for different age groups. (See Appendix C for a complete chart for ages 3-17.)

At least two Nutrient Standards should be used with any school that has grades K-12. Where such a broad spectrum of ages and grades are present, the standard should be changed at or right above the sixth grade level.

Special consideration at age 11

Menu planners should always be aware that the greatest differential in caloric needs occurs between ages 10-11 or between grades 5-6. A one-year age difference does not make a great difference in the RDA requirements for each nutrient when weighted for the predominant group. However, when several ages are added in on either side of the 10-11 age break, either too few nutrients and calories will be provided for those 11+ years or too many calories and fat will be provided for 10 years and under.

The modified data sets (Nutrient Standards) for specified grade and age groups must be incorporated into the menu planner's approved nutrient analysis software system. The established standards will already be in any software that has been approved by USDA.

NuMenus Nutrient Standards for Adults

Any SFA that is using NuMenus and also operates the child and adult care food program under part 226 of CFR may, at its option and with state agency approval, prepare meals provided for these programs using the NuMenus alternative. In such a case, the Nutrient Standards in this chart shall be used for the adult care food program.

Nutrient Standards: Adults 51+ Years	
Breakfast (1/4)	Lunch (1/3)
484 calories ³	644 calories ³
14 g protein	19 g protein
200 mg. calcium	266 mg calcium
2.5 mg iron	3.3 mg iron

225 RE Vitamin A	266 RE Vitamin A
15 mg Vitamin C	20 mg Vitamin C
16 g fat ^{1 & 4}	21 g fat ^{1 & 4}
5 g saturated fat ²	7 g saturated fat ²

Notes

¹ Not to exceed 30 percent of actual total food energy over a school week.

² Less than 10 percent of actual total food energy over a school week.

³ Calories are based on 1934 per day, which recognizes a greater proportion of females in these programs.

⁴ The grams of fat will vary depending on the actual level of calories.

Weekly Averages

After being planned, the menus will be analyzed over a school week using a weighted nutrient analysis with an average based on the projected servings of each menu item. Menus should be planned in accordance with the basic principles of good menu planning, which will be covered in Lesson 7: The ABCs of Menu Planning.

School Week Definition

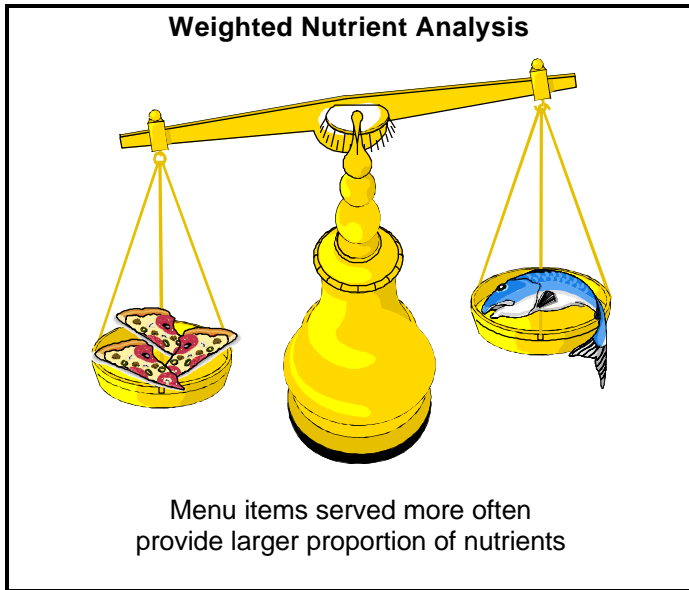
For the purposes of NuMenus, a school week is defined as a minimum of three consecutive days and a maximum of seven consecutive days. If there are fewer than three consecutive days in a week (from Sunday to Saturday), those menus may be combined with either the previous or the coming week.

For example, this would be applied when there are only two days of school during the week of Thanksgiving. Those two days could be combined with either the week before or the week after Thanksgiving. The same situation might arise around other holiday periods or during the first and last weeks of school.

By combining a menu week that only has one or two days in it with another week, the menu planner avoids problems in meeting the Nutrient Standard that can arise out of analyzing such a small sample of meals.

Weighted Nutrient Analysis

Menus will be analyzed and compared to the Nutrient Standard using weighting based on the projected servings of each menu item and condiment. Menu items that are served to more students provide a larger proportion of the nutrients for that meal. Therefore, the nutrients in that menu item should be given more weight. The procedures to do a weighted analysis will be covered in Lesson 9: Nutrient Analysis.



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The advantages of weighted nutrient analysis are:

- An accurate picture of the entire food service's compliance with the nutrition goals
- Avoidance of token items on a menu that make the meal service appear to be in compliance
- Correlation between the nutrient analysis and the actual nutritional value of the meals consumed by the children
- Incentive for the school to make changes in its menus or to know how best to undertake nutrition education

Combination Meal Nutrient Standards

NuMenus and Assisted NuMenus provide schools the option to combine the total nutrients for breakfast and lunch together in proportion to the participation in each meal. Your software system may have the capability to combine your breakfast and lunch analysis in proportion to your participation. This is an optional feature of USDA-approved software.

The method to proportionately combine breakfast and lunch will be covered in detail in Lesson 9: Nutrient Analysis.

Notes

Key Points*NuMenus*

- Approved software and database
- Nutrition disclosure
- Standardized recipes and preparation techniques
- Processed foods analysis

*Slide 13***Approved Software and Database**

When performing nutrient analysis in NuMenus, the school must use USDA-approved software that contains the National Nutrient Database for Child Nutrition Programs (NNDCNP). The NNDCNP is available to software companies and schools to incorporate into nutrient analysis software. A list of approved software is also available from your state agency. The database and the features of the approved software will be covered in Lesson 8: Nutrient Databases and Software for Child Nutrition Programs.

Nutrition Disclosure

Schools are encouraged to disclose the nutrition information available as a result of nutrient analysis and its comparison to the Nutrient Standards. Nutrition disclosure will:

- Promote an increased awareness of the nutrients in their meals
- Make it easier for children and parents to make healthy food choices
- Increase support for school meals through public recognition of improved meal quality

The National School Lunch Act includes a provision as a result of Public Law 103-448 requiring schools to make a public disclosure of the nutrient content of their meals. There will be a proposed rule on this subject in the future. Suggested methods that have worked for other schools will be covered in Lesson 10: Marketing Healthy School Meals. Currently, this disclosure remains voluntary.

Standardized Recipes and Preparation Techniques

In the planning and serving of NuMenus, standardized recipes and preparation techniques must be used. In order to qualify as a standardized recipe, a recipe must have an established yield and quantity. In addition, the ingredients must be constant in measure and preparation. Sources of standardized recipes include the USDA *Quantity Recipes for Schools* and the *New School Lunch and Breakfast*

Recipes...A Tool Kit for Healthy School Meals. Schools may also use local standardized recipes that meet the criteria outlined in Lesson 5: Standardized Recipes and Preparation Techniques or in the *Tool Kit for Healthy School Meals Training Manual*.

In addition to planning menus using standardized recipes and preparation techniques, the school food authority should develop procedures and lines of communication to site staff which result in the use of the planned recipes and techniques.

Processed Foods

When processed foods are used in NuMenus, the nutrient analysis of these products must either be in the NNDCNP or entered into the local database by the school and to be used in the analysis of the meal. There may be a great variation between the nutrient content of seemingly similar foods. Only by using the nutrient analysis of the actual product is the menu planner able to produce an accurate analysis of the meals served. Foods that are included in the reference foods of the NNDCNP, such as basic condiments, canned vegetables, fruits, etc., can be used without obtaining brand name analysis.

The procedures and criteria for obtaining the nutrient analysis from manufacturers and the steps to take to encourage manufacturers to submit their nutrient analyses for inclusion in the National Nutrient Database for Child Nutrition Programs are included in Lesson 8: Nutrient Databases and Software for Child Nutrition Programs.

NuMenus Meals

Menu Item Definition

In NuMenus, the menu planner is dealing with menu items instead of food components and food items. A **menu item** may be any single food or combination of foods. In NuMenus, meals are required to have three menu items for lunch and for breakfast. There are three categories of menu items:

- Entrees
- Milk
- Side Dishes

The determination of whether a food can be counted as one menu item or two depends on how it is **served**. If it is served as one item, it is counted as one item. If it is served as two items, it is counted as two items.

NuMenus	
One Item	Two Items
Hamburger on a Bun	Hamburger Patty Bun
Turkey and Gravy on Potatoes	Turkey and Gravy Mashed Potatoes
Burrito Grande (Tortilla, Meat,	Beef Burrito

Notes

Rice, Tomato, Lettuce, Salsa)	Spanish Rice
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Entree

An entree is a menu item that is a combination of foods or a single food item that is served as the main course.

To determine if an **entree** can be counted as one menu item or more than one menu item when it consists of a combination of foods, look at the way it is **served**. If an entree contains a combination of foods and some of these foods belong to different food groups (i.e., meat, bread, fruits and vegetables, milk, etc.), each food should not be counted as a separate menu item, but as part of the entree (one menu item total).

For example, if a menu planner traditionally serves turkey with gravy over mashed potatoes, then the turkey, gravy and mashed potatoes are considered the entree (all together, it is one menu item). The menu planner has the option to make two menu items by serving potatoes on the side as a separate item.

Milk

The National School Lunch Act requires that fluid milk must be offered to students at breakfast and lunch. Public Law 103-448 did modify the statutory requirement to offer fluid whole milk and fluid unflavored lowfat milk for lunch.

Under NuMenus, schools are required to offer fluid milk as a beverage. Schools are also required to offer a variety of fluid milk consistent with children's preferences in the prior year. If the type of milk represents less than one percent of the total amount of milk consumed in the previous year, the school may elect not to offer that type of milk for lunch.

To assist in meeting the 30% calories from fat goal, the serving of lowfat (2% and 1%) or skim milk should be encouraged.

Side Dishes and Condiments

Any other menu item offered is considered a side dish unless it is a condiment.

While condiments must be taken into consideration when planning and analyzing a meal, they are not counted as menu items for the purpose of meeting the minimum requirement of three menu items for lunch and breakfast nor for the purpose of counting the menu items for Offer versus Serve.

Condiments include such items as relishes, catsup, mustard, jelly, gravies and table spreads.

Foods of Minimal Nutritional Value

Schools using NuMenus or Assisted NuMenus are required to comply with the foods of minimal nutritional value rule (7 CFR 210.00 and 220, Appendix H). Foods affected by this rule are:

Foods of Minimal Nutritional Value

- Soda water
- Water ices—Those water ices which contain fruit or fruit juices are not included.
- Chewing gum
- Certain candies
 - Hard candy: Includes such foods as sour balls, fruit balls, candy sticks, lollipops, starlight mints, after dinner mints, sugar wafers, rock candy, cinnamon candies, breath mints, jaw breakers, and cough drops.
 - Jellies and gums: Includes such foods as gum drops, jelly beans, jellied and fruit-flavored slices.
 - Marshmallow candies
 - Fondant: Includes such foods as candy corn and soft mints.
 - Licorice
 - Spun candy
 - Candy-coated popcorn

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These foods are considered by USDA Regulation as “foods of minimal nutritional value” and cannot be sold during meal time in the same area where reimbursable meals are served and consumed.

Inclusion in nutrient analysis

If a food of minimal nutritional value is a part of a menu item, the nutritional contribution can be counted when the nutritional analysis of the meal is calculated (for example, marshmallows on sweet potato casserole). These foods can assist in meeting calorie goals of reimbursable meals. However, if the food of minimal nutritional value is not included in a menu item, the calories and any other nutrients may not be included in the nutrient analysis.

The rule has not changed; however occasionally some of these foods are included in nutrient analysis based on this guideline.

Lunch

Menus should be planned in accordance with the basic principles of good menu planning as outlined in Lesson 7: ABCs of Menu Planning.

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Example: A cola drink would not be included. Corn candy added to Trail Mix would be included in the nutrient analysis.

See Appendix H for a definition of:

1. Competitive foods
2. Foods of minimal nutritional value

Definition

Lunch Grades K-6	
NuMenus	Food Based
2.5 oz. Hamburger on a Bun	2.5 oz. Hamburger on a 2 oz. Bun
1 cup Fruit Salad	1/4 cup Lettuce & Tomato
Oatmeal Raisin Cookie	1/2 cup Fruit Salad
Fluid Milk Choices	Oatmeal Raisin Cookie
	8 fl. oz. Milk Choices

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In NuMenus, a lunch consists of a minimum of three menu items, (instead of five food items, as with the traditional meal pattern and Food Based Menus):

- An entree
- Fluid milk served as a beverage
- Any other food except a food of minimal nutritional value

Theme Bars

Theme Bars
<ul style="list-style-type: none"> • An entree or menu item that is the main course • Fluid milk, served as a beverage • Any other food except a food of minimal nutritional value

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Salad bars and other theme bars such as pasta bars, taco bars, potato bars, etc., may be served in NuMenus and are considered reimbursable lunches when they consist of:

- An entree or menu item that is the main course or foods such as kidney beans, grated cheddar cheese, diced ham, hard boiled egg, chick peas, tuna and chicken salad, peanut butter, etc.
- Fluid milk, served as a beverage.
- Any other food except a food of minimal nutritional value.

Menu planners should make a standard analysis of their salad/theme bar as a recipe, based on historical usage of bar food items and following the procedures outlined in Lesson 9: Nutrient Analysis. Schools which have more than one typical salad/theme bar need to make several averaged analyses (one for each type of bar) so that each one is represented.

The theme bar recipes are treated as another menu choice and averaged into the weekly nutrient analysis based on projected servings.

Field Trips**Notes****Field Trip**

Weighted and analyzed
Average into total week's menu

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Menus for field trip lunches may be incorporated into the menu analysis of the day they are served along with the regularly scheduled menu items. Menu items served for the field trip menu should be weighted and analyzed according to the procedures outlined in Lesson 9: Nutrient Analysis. The field trip meals will be averaged into the overall week's menu analysis just as if they were meals served on a school campus.

Breakfast**Definition**

Breakfast Grades K-6	
NuMenus	Food Based
1 serving Egg Stratta	1 slice Toast
6 fl. oz. Orange Juice	1 oz. Cereal
Fluid Milk Choices	4 fl. oz. Orange Juice
	8 fl. oz. Milk Choices

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A breakfast consists of a minimum of three menu items:

- Fluid milk served as a beverage
- Any two other foods except a food of minimal nutritional value

Daily vs. Weekly Criteria

The determination of whether the daily lunch or breakfast menu meets the requirements depends on having the correct number of menu items. Whether the weekly menu meets the requirements depends on meeting the Nutrient Standards.

**Daily vs. Weekly
Criteria**

Daily	=	Correct # of menu items
Weekly	=	Nutrient Standards

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All Foods Count in Nutrient Analysis

All menu items served in a meal, including condiments, are included in the nutrient analysis and count toward meeting the Nutrient Standard for the meal. However, foods or menu items that are considered foods of minimal nutritional value under 7 CFR 210.00 and 220, Appendix H (i.e., chewing gum, soda water, water ices, and certain candies—hard candy, jellies and gums) can only be included in the nutrient analysis calculations if they are part of a menu item.

Offer versus Serve (OVS)

General Rules

Offer versus Serve General Rules

- Allows students to decline a certain number of menu items in the meal.
- Reduces food waste and food costs.
- Must be implemented in senior high schools for lunch.
- Junior high, middle schools and elementary schools have the option for lunch.

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Goals

Goals of Offer versus Serve

- Minimize plate waste
- Encourage more food choices

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The original intent of Offer versus Serve using the traditional meal pattern method of menu planning (NSLP and SBP meal patterns) was to:

- Minimize plate waste
- Encourage more food choices

In NuMenus, the goal is to maintain these benefits. Logically, a student who takes and consumes the full meal (all menu items) will receive the full nutritional benefit provided. The fewer the menu items taken and consumed under OVS, the lower the nutritional benefit derived. Although in non-OVS schools students are required to *take* the reimbursable meal, there is no guarantee that students *consume* the full meal.

Many school food service managers attest that students consume more under OVS where they are not **required** to take the full reimbursable meal because:

1. They are more likely to eat all of the menu items they choose themselves, and
2. They realize they get more for their money if they take the full reimbursable meal.

Rules

National School Lunch Program

Offer versus Serve

Traditional Meal Pattern

- All five food items must be offered to all students.
- The serving sizes must equal the minimum required quantities.
- The lunch must be priced as a unit and students may take 3, 4, or all 5 items for the same price.
- Students have the option of which item(s) to decline.

Slide 23

School Breakfast Program

Offer versus Serve

Traditional Meal Pattern

- All four food items must be offered to students.
- The serving sizes must equal the minimum quantities required.
- The breakfast must be priced as a unit and students may take 3 or 4 items for the same price.
- Students have the option of which item to decline.

Slide 24

Offer versus Serve for NuMenus

National School Lunch Program

National School Lunch Program

Offer versus Serve

NuMenus

- Minimum of three menu items
- Offer versus serve required at senior high; optional below that level
- Must select at least two items
- One item must be an entree
- If more than three items offered, student may decline no more than two

Notes

Slide 25

Students must be offered at least three menu items (one menu item must be an entree and one must be fluid milk).

Offer versus Serve is required at the senior high level, but is optional below that level.

Students in schools with Offer versus Serve must select at least two of the menu items. If schools offer more than three menu items for a single reimbursable lunch, students may only decline a maximum of two menu items.

Students must select the entree in order to have a reimbursable lunch. An entree is defined as a “combination of foods or a single food item that is offered as the main course.”

School Breakfast Program

School Breakfast Program
Offer versus Serve

NuMenus

- Minimum of three menu items must be offered
- Must select at least two items
- Decline a maximum of one item

Slide 26

Students must be offered at least three menu items.

At the school food authority’s option, students may participate in Offer versus Serve. Students must select at least two menu items and decline a maximum of one menu item. There is no requirement for an entree for breakfast.

Counting Menu Items for OVS

Students may be offered a variety of menu items and choices for each menu item at each meal. The meal planner establishes what constitutes a reimbursable meal from among the various menu items and choices in menu items that are offered.

For example, a senior high school may offer the following at lunch:

- three entrees
 - Lasagna
 - Macaroni and cheese
 - Chicken nuggets
- four vegetable/fruit side dishes
 - Green beans
 - Oven-baked fries
 - Corn
 - Fresh apple
- three varieties of milk

Notes

Show T-8 – Lunch Choices
 T-9 – Breakfast Choices
 T-10 – Salad Bar

Choices
 Activity
 With the class, determine several options that would constitute a meal under offer versus serve.

- Chocolate
- 2%
- Skim
- three choices of bread
 - Rolls
 - Garlic bread
 - Bread sticks
- three choices of desserts
 - Rice pudding
 - Fruit cup
 - Oatmeal cookies

The menu planner determines that the entree, milk, one serving each of a vegetable side dish, bread and dessert constitute a reimbursable meal (five menu items). Under Offer versus Serve, at a minimum, the student must take the entree and two other menu items. Therefore, a reimbursable meal could be lasagna, milk and green beans; or chicken nuggets, corn and oatmeal cookies; or macaroni and cheese, rolls and milk.

Choices

While multiple choices may be offered for various menu items, the number of **choices** does not affect the number of **menu items** that the menu planner establishes for any given meal as comprising a reimbursable lunch or breakfast.

Tastes

Under Offer versus Serve, students are allowed to take smaller portions of the **declined** menu items; the required menu items taken by the student, however, must be a full serving.

Price as a Unit

The decision to decline the allowable number of menu items or to accept smaller portions of otherwise declined menu items does not affect the charge for the meal.

Nutrition Goals

In addition to determining what makes up a reimbursable meal, the menu planner establishes what the entrees are and the serving sizes of the menu items. Planning is designed to meet or exceed the minimum nutrient levels for the various age groups. There are no minimum quantities established by the regulations for any menu item.

Point of Service Identification

For the purpose of identifying a reimbursable meal at the point of service, the menu planner will need to provide students and cashiers with details about the various combinations of menu items (including the various entrees) that may constitute a reimbursable meal.

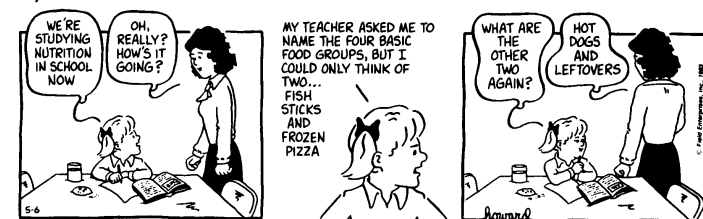
Notes

If the school has a salad bar, the students may be able to make an “entree salad” or a “side salad” (a side dish menu item) from the various ingredients.

For example, students and cashiers need to be informed that the entree salad consists of two scoops of tuna or chicken salad plus a bowl of lettuce and other items. The side salad/menu item could be a bowl of lettuce and other vegetables or a bowl of fruit salad.

Leftovers and Substitutions

Sally Forth



2

Substitutions

- Substitutions change the nutrient content
- Meals may no longer meet the Nutrient Standard

Slide 27

Substitutions

Occasionally it is necessary to make a substitution to a planned menu cycle due to various reasons such as effective use of leftovers, food shortage or improper delivery from vendors.

- Substitutions change the nutrient content.
- Meals may no longer meet the Nutrient Standard.

When food substitutions are made due to an emergency situation (i.e., food shortage), it is impractical for menu planners to revise menus and recalculate nutrient amounts, especially if the emergency arises at the end of the week.

Two-Week Window

If the need for service of a substitute item or leftovers occurs prior to a two-week “window” before the week the original menu item is to be served, the week’s menus will be reanalyzed and the Nutrient Standards met with the substituted item.

Definition

The two-week “window” is the two-week period before the day of the menu item substitution.

Notes

Show Sally Forth cartoon, T-11

Substitutions and leftovers are a fact of life, but we hope you will use good management techniques to minimize their effect on the nutrient content of your meals.

² Reprinted with special permission from King Features Syndicate.

If the need for a substitution is known two weeks or more before the menu date, or **outside the two-week window**:

- Reanalyze
- Meet the Nutrient Standard

If the need occurs within the two-week window:

- No reanalysis required
- Try to use a similar food

Slide 28

If a food is substituted that is not a similar food according to the definition in this section, a reanalysis may be done, but it is not required.

Similar Foods

For the purposes of NuMenus, a similar food will mean that at the site level, the substitution:

- Plays the same role in the meal
 - Entree
 - Milk
 - Other menu items
- Is from the same food group

Similar Food

- Plays the same role in the meal
 - Entree
 - Milk
 - Other menu item
- Is from the same food group

Slide 29

Menu planners are encouraged to monitor the substitutions and reanalyze if in their judgment the Nutrient Standards would no longer be met. If the standards are not being met, additional training with staff should be done to reduce substitutions and leftovers.

Leftovers

Effective use of leftovers is allowed in NuMenus:

Leftovers

- Freeze and remenu, or use within a safe period
- Reanalysis not required
- Try to sub for a similar food

Slide 30

Leftovers may be frozen and used when the menu item is on the menu again, or they may be used as a substitute at a

Notes

Activity – Substitutions
Appendix I
Lead the participants through the activity. Ask if there are any questions about substitutions.

later date. The same rules apply to leftovers as apply to substitutions regarding reanalyzing the weekly menus.

Any leftover not frozen for reuse should be used within a safe period. Bacteria continue to grow even under refrigeration.

Theme Bar Substitutions

Theme Bar Substitutions

- Two-week window applies
- Make new theme bar recipe if several substitutions occur before the two-week window

Slide 31

When substitutions occur on a theme bar, the same rules apply as for a regular lunch.

Documentation

Documentation of substitutions and leftovers should be maintained by making notes on the menu production record or by other means.

Documentation

- Substitutions
- Leftovers

Slide 32

Fortification of Foods

Diets composed of a variety of foods derived from all of the major food groups should provide the balance of nutrients for good health.

Concerns with NuMenus

Use of highly fortified foods

- Variety limited
- Shortage in nutrients not monitored

Slide 33

The Department of Agriculture is concerned that a preponderance of fortified engineered foods may appear in meals served to children under NuMenus. Scientifically based criteria for clear judgments in this area that can be applied in a consistent manner to a variety of food do not exist.

Notes

USDA Nutrition Policy

USDA strongly supports the nutrition recommendations presented in the Dietary Guidelines for Americans. These guidelines call for menus that use a variety of foods from all the major food groups. The Department cautions that unrestricted use of fortified foods to meet the established target nutrients may result in limitations in the nutrients in the meals served to children and may also result in shortages in some nutrients for which exact identification requirements and functions have not yet been established.

Schools using NuMenus will be required to offer three menu items at both the breakfast and lunch meals even if the Nutrient Standard can be met with fewer than three items, and calorie levels for the appropriate age/grade groups will still have to be met. These requirements should discourage attempts to meet the Nutrient Standard with one or two heavily fortified foods.

As previously stated, it is better to obtain nutrients from a variety of foods, not from a few highly fortified foods or supplements because:

- Within each group, some foods are better sources of some nutrients.
- Food served from day to day should be varied so children and teens get the nutrients they need for growth and health.
- Certain quantities of food are needed to ensure that energy requirements of children are met.

Other Regulations for NuMenus**Alternate Foods for Meals*****Enriched Macaroni with Fortified Protein***

Current regulations state that one ounce of a dry enriched macaroni product with fortified protein (that meets the nutrient specifications) may be used to meet not more than one-half of the meat or meat alternate requirements when served in combination with one or more ounces of cooked meat, poultry, fish or cheese. This substitution still holds for menu items served under NuMenus when cooked meat, poultry, fish or cheese is included. However, under this menu planning option, there are no requirements for specific foods (except fluid milk). Therefore, if meat, fish, poultry or cheese are not used in the menu item, the limitation and nutrient specifications do not apply.

Cheese Alternate Products

Current regulations state that cheese alternate products (that meet the nutrient specifications) shall be prepared and served in combination with natural or processed cheese and

Notes

that the quantity, by weight, of cheese alternate product in the combination shall not exceed that of the natural or processed cheese. This substitution still holds for menu items served under NuMenus when cheese alternate product is used in combination with natural or processed cheese. As above, if cheese is not used in the menu item, the limitation and nutrient specifications do not apply.

Vegetable Protein Products (VPP)

Vegetable protein products (that meet the nutrient specifications) may not exceed a ratio of 30 parts fully-hydrated VPP to 70 parts uncooked meat, fish or poultry. As above, if meat, fish or poultry is not used in the menu item, the limitation and nutrient specifications do not apply.

Child Nutrition Labeling Program

The Child Nutrition Labeling Program has specific application to the Food Based Menus and does not apply to menus developed under either NuMenus or Assisted NuMenus.

Special Points

Special Points	
•	Substitutions for:
–	Disabled
–	Medical or dietary needs
•	Unit price
•	Same selection for all
•	Each OVS menu item different

Slide 34

There are some additional points of information on the National School Lunch Program and School Breakfast Program that should be addressed because they continue to be required under NuMenus:

- Substitutions must be provided to disabled students when their disability restricts their diet. The substitution must be supported by a statement signed by a physician and maintained on file.
- Substitutions may be made on a case-by-case basis if a child is unable to consume the required food because of medical or other dietary needs. Exceptions must be supported by a statement from a recognized medical authority that is maintained on file.
- Both lunches and breakfasts must be priced as a unit. Offer versus Serve must not affect the selling price of the lunch or breakfast.
- All children must be offered the same selection regardless of whether the children are eligible for

Notes

free or reduced-price meals or pay the full price. If certain items are not made available to all children, including those receiving free or reduced-price meals, those items may not be counted toward reimbursable meals.

- Students cannot select two of the same menu items under OVS (i.e., two entrees or two servings of the same vegetable) and have it count towards a reimbursable meal (each menu item must be different).

When substitutions are made for disabled students or for medical or dietary needs, and the change is supported by a physician or recognized medical authority, the menu is not included in the menu plan for nutrient analysis or included for purposes of meeting the Nutrient Standard.

Summary

Benefits of NuMenus

- Flexibility
- Customer preference
- Cost
- Image and credibility
- Technology skills
- Nutrition disclosure

Slide 35

NuMenus and Assisted NuMenus provide menu plans that break with tradition and allow the menu planner great flexibility in meeting customer preferences and cost constraints. The menus will be immediately analyzed for compliance with the nutrition goals. This increases the credibility of the program and enhances the image of providers of healthy school meals. In addition, technology skills are developed and demonstrated. And nutrition disclosure reveals the nutritional quality achieved by the menus.

Menu Planners are reminded that the first Dietary Guideline is to eat a variety of foods. Planning for NuMenus with a variety of foods from each food group will result in menus that not only meet the nutrition goals, but that provide all of the trace nutrients and dietary components necessary for good health.

Notes

6 Guided Practice

Activity: Quizzes

Appendix J

7 Individual Practice

None

8 Closure

Show the menus from the set again.

Can students spot the ones that do

not meet the Program Requirements?

Review competencies.

9 Back on the Job...

Program Requirements is an important area to come in staff training.

Benefits of Assisted NuMenus

- Benefits = NuMenus
- Model menus available
- Training opportunities
- Transition to NuMenus
- Sharing experience

Slide 36

Notes

Appendix A: Recommended Dietary Allowances

The Recommended Dietary Allowances (RDA) are defined as the level of intake of essential nutrients that, on the basis of scientific knowledge, are judged by the Food and Nutrition Board of the National Academy of Science to be adequate to meet the known nutrient needs of practically all healthy persons. Recommended Dietary Allowances are periodically revised as new research provides better data on nutrient needs. The RDA is intended to provide for individual variations among most healthy persons who live in the United States. A person does not necessarily have a nutritional deficiency because his or her diet fails to meet the RDA. The RDA is intended to be used as a guide for planning diets for groups of people. The theory is that if diets meet 100 percent of the RDA, it will be highly unlikely that people will suffer from a nutritional deficiency, unless they are sick or have a condition that increases nutrient needs or interferes with nutrient utilization.

Because of the use of the RDA in national Child Nutrition Programs, it is important to understand their appropriate applications and limitations. Three points are of particular importance and are repeated here:

Part of a Normal Diet

The recommended allowances for nutrients are amounts intended to be consumed as part of a normal diet. If the RDA are met through a variety of foods from diverse food groups rather than by supplementation or fortification, such diets will likely be adequate in all other nutrients.

Needs of a Group

RDA are safe and adequate levels intended to be sufficiently generous to meet the needs of a group of people.

Probable Risk

Although RDA are most appropriately applied to groups, a comparison of individual intakes averaged over a sufficient length of time and compared to the RDA allows an estimate to be made about the probable risk of problems for that individual.

Appendix A – (continued)

1989 Recommended Dietary Allowances Revised Table

The Allowances are expressed as average daily intakes over time, and are intended to provide for individual variations among most normal persons under usual environmental stresses in the United States.

Age (years) & gender	Reference Weight	Reference Height	Vitamins													Minerals							
			Protein	Vitamin A	Thiamin	Riboflavin	Niacin	Vitamin B6	Folacin	Vitamin B12	Vitamin C	Vitamin D	Vitamin E	Vitamin K	Calcium	Iodine	Iron	Magnesium	Phosphorus	Selenium	Zinc		
	kg	lbs	cm	in	g	RE	mg	mg	NE	mg	µg	µg	mg	µg	αTE	µg	mg	µg	mg	mg	mg	µg	mg
Infants																							
0.0 - 0.5	6	13	60	24	13	375	0.3	0.4	5	0.3	25	0.3	30	7.5	3	5	400	40	6	40	300	10	5
0.5 - 1.0	9	20	71	28	14	375	0.4	0.5	6	0.6	35	0.5	35	10	4	10	600	50	10	60	500	15	5
Children																							
1 - 3	13	29	90	35	16	400	0.7	0.8	9	1.0	50	0.7	40	10	6	15	800	70	10	80	800	20	10
4 - 6	20	44	112	44	24	500	0.9	1.1	12	1.1	75	1.0	45	10	7	20	800	90	10	120	800	20	10
7 - 10	28	62	132	52	28	700	1.0	1.2	13	1.4	100	1.4	45	10	7	30	800	120	10	170	800	30	10
Males																							
11 - 14	45	99	157	62	45	1000	1.3	1.5	17	1.7	150	2.0	50	10	10	45	1200	150	12	270	1200	40	15
15 - 18	66	145	176	69	59	1000	1.5	1.8	20	2.0	200	2.0	60	10	10	65	1200	150	12	400	1200	50	15
19 - 24	72	160	177	70	58	1000	1.5	1.7	19	2.0	200	2.0	60	10	10	70	1200	150	10	350	1200	70	15
25 - 50	79	174	176	70	63	1000	1.5	1.7	19	2.0	200	2.0	60	5	10	80	800	150	10	350	800	70	15
51 +	77	170	173	68	63	1000	1.2	1.4	15	2.0	200	2.0	60	5	10	80	800	150	10	350	800	70	15
Females																							
11 - 14	46	101	157	62	46	800	1.1	1.3	15	1.4	150	2.0	50	10	8	45	1200	150	15	280	1200	45	12
15 - 18	55	120	163	64	44	800	1.1	1.3	15	1.5	180	2.0	60	10	8	55	1200	150	15	300	1200	50	12
19 - 24	58	128	164	65	46	800	1.1	1.3	15	1.6	180	2.0	60	10	8	60	1200	150	15	280	1200	55	12
25 - 50	63	138	163	64	50	800	1.1	1.3	15	1.6	180	2.0	60	5	8	65	800	150	15	280	800	55	12
51 +	65	143	160	63	50	800	1.0	1.2	13	1.6	180	2.0	60	5	8	65	800	150	10	280	800	55	12
Pregnant																							
Lactating					60	800	1.5	1.6	17	2.2	400	2.2	70	10	10	65	1200	175	30	320	1200	65	15
1st 6 mo.					65	1300	1.6	1.8	20	2.1	280	2.6	95	10	12	65	1200	200	15	355	1200	75	19
2nd 6 mo.					62	1200	1.6	1.7	20	2.1	260	2.6	90	10	11	65	1200	200	15	340	1200	75	16

Recommended Dietary Allowances. 10th revised edition © 1989, by the National Academy of Sciences, National Academy Press, Washington DC. The RDA are designed for the maintenance of good nutrition of practically all healthy people in the United States. The recommended amounts are related to the reference heights and weights listed here. Weights and heights are the medians for the U.S. Population as reported in NHANES II: the median weights of those under 19 years of age from Hamill et al. 1979.

DEFINITIONS:

mcg or µg = micrograms; 1000 mcg = 1 mg; 1000 mg = 1 gram.

Thiamin = Vit B1; Riboflavin = Vit B2; Niacin = Vit B3. RE (Retinol equivalents) = 1µ Vitamin A from animal sources, or 6 µ of Vitamin A from B-carotene (plant sources). Vitamin D: 10 µg of Vitamin D (as cholecalciferol) = 400 IU (International Units). IUs are an older measure. Vitamin E: 1 mg of d-α-tocopherol = 1 aTE (TE = tocopherol equivalent). Niacin (Vitamin B3): NE (niacin equivalent) is 1 mg of niacin or 60 mg of dietary tryptophan. Also referred to as mg-NE.

Appendix A – continued

Recommended Energy Intake

Category	Age	Weight		Height		REE* (kcal/day)	Average Energy Allowance (kcal)**		
		kg	lb.	cm	in.		Multiples of REE	Per kg	Per day***
Infants	0.0-0.5	6	13	60	24	320		108	650
	0.5-1.0	9	20	71	28	500		98	850
Children	1-3	13	29	90	35	740		102	1300
	4-6	20	44	112	44	950		90	1800
	7-10	28	62	132	52	1130		70	2000
Males	11-14	45	99	157	62	1440	1.70	55	2500
	15-18	66	145	176	69	1760	1.67	45	3000
Females	11-14	46	101	157	62	1310	1.67	47	2200
	15-18	55	120	163	64	1370	1.60	40	2200

Modified from Recommended Dietary Allowances, ed 10, National Research Council, Washington, DC, 1989, National Academy Press.

* Calculation based on WHO equations, then rounded. 3 REE, Resting energy expenditure.

** In the range of light to moderate activity, the coefficient of variation is $\pm 20\%$.

*** Figure is rounded.

Appendix B: Activity

Nutrients

Directions: List the nutrients and dietary components for each of the following:

Nutrients and Dietary Components in Nutrient Standards

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Other Nutrients and Dietary Components Analyzed

- 1.
- 2.
- 3.
- 4.

Appendix C: Standard RDA Data Set

Not all school districts are divided into the age groups of 3-7, 7-10, 11-13 and 14-17. Therefore, the process must support the menu planner's ability to create additional RDA standards and categories by weighting, combining, and/or averaging the RDA from the four different age groups.

Schools in which the age groupings differ from the established standard may create new RDA standards that correlate with the age groups in their school district.

The following breakfast and lunch – Standard RDA Data Sets are to be used to determine the RDA for schools where age groupings do not correlate with standard age groupings.

Breakfast RDA (1/4)

	Calories	Protein (g)	Calcium (mg)	Iron (mg)	Vit A (RE)	Vit C (mg)	Fat (g)*	Sat fat (g)**
Age 3	325	4	200	2.5	100	10	11	4
Age 4	450	6	200	2.5	125	11.25	15	5
Age 5	450	6	200	2.5	125	11.25	15	5
Age 6	450	6	200	2.5	125	11.25	15	5
Age 7	500	7	200	2.5	175	11.25	17	6
Age 8	500	7	200	2.5	175	11.25	17	6
Age 9	500	7	200	2.5	175	11.25	17	6
Age 10	500	7	200	2.5	175	11.25	17	6
Age 11	588	11.4	300	3.4	225	12.5	20	7
Age 12	588	11.4	300	3.4	225	12.5	20	7
Age 13	588	11.4	300	3.4	225	12.5	20	7
Age 14	588	11.4	300	3.4	225	12.5	20	7
Age 15	650	13	300	3.4	225	15	22	7
Age 16	650	13	300	3.4	225	15	22	7
Age 17	650	13	300	3.4	225	15	22	7

Lunch RDA (1/3)

	Calories	Protein (g)	Calcium (mg)	Iron (mg)	Vit A (RE)	Vit C (mg)	Fat*	Sat Fat**
Age 3	433	5.3	267	3.3	133	13.3	14	5
Age 4	600	8	267	3.3	167	15	20	7
Age 5	600	8	267	3.3	167	15	20	7
Age 6	600	8	267	3.3	167	15	20	7
Age 7	667	9.3	267	3.3	233	15	22	7
Age 8	667	9.3	267	3.3	233	15	22	7
Age 9	667	9.3	267	3.3	233	15	22	7
Age 10	667	9.3	267	3.3	233	15	22	7
Age 11	783	15.2	400	4.5	300	16.7	26	9
Age 12	783	15.2	400	4.5	300	16.7	26	9
Age 13	783	15.2	400	4.5	300	16.7	26	9
Age 14	783	15.2	400	4.5	300	16.7	26	9
Age 15	867	17.2	400	4.5	300	20	29	10
Age 16	867	17.2	400	4.5	300	20	29	10
Age 17	867	17.2	400	4.5	300	20	29	10

* There is no RDA for fat. However, menu planners may also monitor the fat content of meals based on the amount of fat in grams as opposed to monitoring the percentage of calories from fat. The amount of fat (in grams) that meals contain is based on the recommended calorie level of each age group.

**There is no RDA for saturated fat. However, menu planners may also monitor the saturated fat content of meals based on the amount of saturated fat in grams as opposed to monitoring the percentage of calories from saturated fat. The amount of saturated fat (in grams) that meals contain is based on the recommended calorie level of each age group.

Appendix D: Determining Nutrient Standards

An example of how USDA determined the age grouping Nutrient Standards is shown here using the example of calories for the 14-17 years age group:

Age	Total RDA/Day (Calories)	Sex
14	2500	Male
15-17	3000	Male
14	2200	Female
15-17	2200	Female

Step 1: To Determine 1/3 RDA:

2500 calories ÷ by 3 = 833 calories

3000 calories ÷ by 3 = 1000 calories

2200 calories ÷ by 3 = 733 calories

Step 2: To average 1/3 RDA for males ages 14-17 years:

Age 14 years 833 calories

Age 15 years +1000 calories

Age 16 years +1000 calories

Age 17 years +1000 calories

3833 calories

Divided by 4 = 958 calories

Step 3: To average 1/3 RDA for females ages 14-17 years:

Age 14 years 733 calories

Age 15 years +733 calories

Age 16 years +733 calories

Age 17 years +733 calories

2932 calories

Divided by 4 = 733 calories

Step 4: To average 1/3 RDA for males and females ages 14-17 years:

958 calories (1/3 RDA for males)

+733 calories (1/3 RDA for females) = 1691 calories

Divided by 2 = 846 calories per day

Appendix E: Activity

Grams of Fat

1. Based on a breakfast meal that contains 525 calories and is served to a 3rd grade girl, calculate the approximate number of grams of fat this breakfast could contain and still meet the goal of 30% or less calories from fat.

$$525 \times \underline{\hspace{1cm}} \% = \underline{\hspace{1cm}} \text{ calories from fat}$$

$$\underline{\hspace{1cm}} \text{ calories from fat divided by 9 calories per gram of fat}$$

$$= \underline{\hspace{1cm}} \text{ grams of fat}$$

2. Based on a lunch meal that contains 800 calories and is served to a 10th grade boy, calculate the approximate number of grams of saturated fat this lunch could contain and still meet the goal of 10% or less calories from saturated fat.

$$800 \times \underline{\hspace{1cm}} \% = \underline{\hspace{1cm}} \text{ calories from saturated fat}$$

$$\underline{\hspace{1cm}} \text{ calories from saturated fat divided by 9 calories per gram of fat}$$

$$= \underline{\hspace{1cm}} \text{ grams of saturated fat}$$

Appendix F: Activity

Selecting Nutrient Standards

If the ages or grades of children in your school do not meet the preset groupings, you need to evaluate whether it is necessary to use more than one Nutrient Standard or create a modified custom Nutrient Standard for your school.

Criteria: If only one age or grade group is outside the Nutrient Standard on either end, the majority standard may be used. If ages span more than two years beyond the 10-11 age breaks, two groups must be used.

Example 1

New Town Primary School has grades K-3 and uses NuMenus. The students are 5-8 years old. Which Nutrient Standards could be used?

- 1.
- 2.
- 3.
- 4.

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 2

Old Town Union School has grades K-12 and uses Assisted NuMenus. The students are 5-17 years old. Which Nutrient Standards could be used to evaluate the nutritional adequacy of this menu?

- 1.
- 2.
- 3.

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 3

Up Town Junior High has grades 6-9 and uses Assisted NuMenus. The students are 11-14 years old. Which Nutrient Standards could be used?

- 1.
- 2.
- 3.
- 4.

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 4

Suburban Elementary School has grades K-8 and uses NuMenus. The ages of the students range from 5-13. Which Nutrient Standards could be used to evaluate the nutritional adequacy of this menu?

- 1.
- 2.
- 3.

Which Nutrient Standard would best meet the nutritional needs of the group?

Appendix G: Age to Grade Chart

Age to Grade Comparison

Age	Grade
5	K
6	1
7	2
8	3
9	4
10	5
11	6
12	7
13	8
14	9
15	10
16	11
17	12

Appendix H: Definition of Competitive Foods and Foods of Minimal Nutritional Value

Competitive Foods

Competitive foods means any foods sold in competition with the program to children in food service areas during the lunch periods.

Foods of Minimal Nutritional Value

A Food of Minimal Nutritional Value means:

1. In the case of artificially sweetened foods, a food which provides less than five percent of the Reference Daily Intakes (RDI) for each of eight specified nutrients per serving; and
2. In the case of all other foods, a food which provides less than five percent of the RDI for each of eight specified nutrients per 100 calories and less than five percent of the RDI for each of eight specified nutrients per serving.

The eight nutrients to be assessed for this purpose are:

1. Protein
2. Vitamin A
3. Vitamin C
4. Niacin
5. Riboflavin
6. Thiamin
7. Calcium
8. Iron

General Information

State agencies and school food authorities shall establish such rules or regulations as are necessary to control the sale of foods in competition with lunches served under the Program. Such rules or regulations shall prohibit the sale of foods of minimal nutritional value, as listed in Appendix H of this part, in the food service areas during the lunch periods. The sale of other competitive foods may, at the discretion of the state agency and school food authority, be allowed in the food service area during the lunch period only if all income from the sale of such foods is accrued to the benefit of the nonprofit school food service or the school or student organizations approved by the school. State agencies and school food authorities may impose additional restrictions on the sale of and income from all foods sold at any time throughout schools participating in the Program.

Appendix I: Activity

Substitutions

Menu planners must be able to recognize situations that would require reanalysis of the menu. Try to determine which of the situations below could result in the menu being reanalyzed.

1. The September 14th menu calls for Orange Wedges. There is a freeze in southern California and no oranges are available. Your produce purveyor calls August 30th to inform you of the need to change and you decide to use Apple Wedges. Do you need to reanalyze the menu? Why or why not?
2. On September 18th there are 20 servings of rice left over. The cook freezes the leftovers. On September 24th, the school runs out of rolls to serve with Baked Chicken. The cook pulls the leftover rice out, heats and serves it with chicken. Do you need to reanalyze the menu? Why or why not?
3. The September 29th menu calls for Beef and Bean Burritos. The delivery arrives from the distributor on September 27th. You have been shorted two cases of burritos, but they send two cases of Chicken and Bean and Cheese Quesadillas as a substitution. Do you need to reanalyze the menu? Why or why not?
4. On October 14th, the menu calls for Peach Cobbler. The day before, the baker burns the cobbler and it must be thrown out. The manager knows there needs to be another menu item, but only has ice cream to substitute for the cobbler. Do you need to reanalyze the menu? Why or why not?

Appendix J: Activity

Quizzes

A. Reimbursable Meals

Which of these lunch meals would not meet the criteria for a reimbursable meal in NuMenus?
(Whether or not 1/3 RDA criteria is being met is irrelevant for this exercise.)

1. Entree - Lasagna
Green Beans
Italian Bread
Whole Milk
2. Entree - Hamburger with Lettuce and Tomato
Skim Milk
3. Entree - Green Bean Casserole
Fruit Salad
Lowfat Milk
4. Entree - Baked Chicken
Yogurt
Skim Milk
5. Entree - Bean Burrito
Spanish Rice
Lowfat Milk

B. Offer versus Serve

Which of these lunch meals would not be considered a reimbursable meal under OVS in NuMenus?
(Whether or not 1/3 RDA criteria is being met is irrelevant for this exercise.)

1. Entree - Steak Sandwich
Celery Sticks
French Fries
Whole Milk
The student chooses the steak sandwich and whole milk.
2. Entree - Pizza
Fresh Peach
Skim Milk
The student chooses a fresh peach and skim milk.
3. Entree -Tacos with Lettuce and Tomato
Fruit Cocktail
Potato Rounds
Lowfat Milk
The student chooses tacos with lettuce and tomato.
4. Entree -Chicken Nuggets
Tossed Salad
Dinner Roll
Yogurt
Whole Milk
The student chooses a dinner roll and yogurt.
5. Entree - Cheddar Cheese Nachos
Chicken Enchilada
Skim Milk
The student chooses nachos and an enchilada.

C. Special Points

Answer the questions below, giving the rationale for your answer.

1. The mother of a disabled student sends a note to school asking the Cafeteria Manager to substitute all fresh fruits and vegetables with canned fruits only. Should the manager make the substitutions? Why?

2. A statement signed by a local pediatrician is sent to the Child Nutrition Program director asking that all of his patients be given fruit juice instead of milk. Should the director make the substitution for John Smith at Fair Oaks Elementary who says he is a patient of this doctor? Why?

3. The cashier tallies a lunch under Offer versus Serve and charges Sue Jones only \$1.25 for her Grilled Cheese and Apple because she did not take the Milk and Pasta Salad that was also offered for the full meal price of \$1.75. Is this correct? Why?

4. The Child Nutrition Program director offers a "Coaches Corner" lunch at the high school with larger portions. Even though the price to paying students is 25¢ more, he lets free and reduced-price students select this meal at no extra charge. Is this correct? Why?

5. Tim Brown is not feeling well and selects two milks for lunch at Fair Oaks Elementary School which has Offer versus Serve. Does this meal meet the criteria for a reimbursable meal? Why?

D. Leftovers and Substitutions

Which of the following leftover substitutions can be made without significantly affecting the nutrient analysis of the menu that the leftover will be included in?

1. Leftover: Lasagna
Menu Item the Leftover is substituting for: Green Peas
2. Leftover: Fresh Orange
Menu Item the Leftover is substituting for: Steamed Broccoli
3. Leftover: Cherry Crisp
Menu Item the Leftover is substituting for: Sponge Cake
4. Leftover: Baked Potato
Menu Item the Leftover is substituting for: Egg Noodle
5. Leftover: Banana Bread
Menu Item the Leftover is substituting for: Spanish Rice

E. Competitive Foods (Foods of Minimal Nutritional Value)

Which of these foods are considered as “foods of minimal nutritional value” and cannot be used as part of a nutrient analysis in NuMenus?

1. Cotton candy
2. Candy corn in a Halloween trail mix
3. Chocolate candy bar with nuts
4. Root Beer flavored carbonated soda
5. Ice cream sandwich
6. Granola bar
7. Miniature marshmallows used as garnish for chocolate pudding
8. Orange flavored soda which meets 10% of the US RDA for vitamin C (vitamin C content verified by FCS under petition of vendor)
9. 100% Honey candy stick
10. Cherry licorice

Appendix K: Required Grade Nutrient Standards

Required Grade Nutrient Standards - Breakfast

Calories and Nutrient Levels for School Breakfast (school week averages)			
	Preschool	Grades K-12	Option Grades 7-12
Energy Allowances (calories)	388	554	618
Total fat (g) ³	13 ¹	18 ¹	21 ¹
Total saturated fat (g) ³	4 ²	6 ²	7 ²
Protein (g)	5	10	12
Calcium (mg)	200	257	300
Iron (mg)	2.5	3.0	3.4
Vitamin A (RE)	113	197	225
Vitamin C (mg)	11	13	14

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on actual level of calories offered.

Required Grade Nutrient Standards - Lunch

Calorie and Nutrient Levels for School Lunch (school week averages)				
	Pre-School	Grades K-6	Grades 7-12	Grades K-3 Option
Energy Allowances (Calories)	517	664	825	633
Total Fat (g) ³	17 ¹	22 ¹	28 ¹	21 ¹
Total Saturated Fat (g) ³	6 ²	7 ²	9 ²	7 ²
Protein (g)	7	10	16	9
Calcium (mg)	267	286	400	2 67
Iron (mg)	3.3	3.5	4.5	3.3
Vitamin A (RE)	150	224	300	200
Vitamin C (mg)	14	15	18	15

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on actual level of calories offered.

Appendix L: Optional Age Group Nutrient Standards

Optional Age Nutrient Standards for NuMenus – Breakfast

Minimum Calorie and Nutrient Levels for School Breakfast (school week averages for age groups)				
Nutrients and energy allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and older
Energy Allowances/Calories	419	500	588	625
Total Fat (g) ³	14 ¹	17 ¹	20 ¹	21 ¹
Saturated Fat (g) ³	5 ²	6 ²	7 ²	7 ²
RDA for Protein (g)	5.50	7.00	11.25	12.50
RDA for Calcium (mg)	200	200	300	300
RDA for Iron (mg)	2.5	2.5	3.4	3.4
RDA for Vitamin A (RE)	119	175	225	225
RDA for Vitamin C (mg)	11.00	11.25	12.50	14.40

¹ Total fat not to exceed 30 percent over a school week .

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on the actual level of calories offered.

Optional Age Nutrient Standards for NuMenus – Lunch

Minimum Calorie and Nutrient Levels for School Lunch (school week averages for age groups)				
Nutrients and energy allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and older
Energy Allowances/Calories	558	667	783	846
Total Fat (g) ³	19 ¹	22 ¹	26 ¹	28 ¹
Saturated Fat (g) ³	6 ²	7 ²	9 ²	9 ²
RDA for Protein (g)	7.3	9.3	15.0	16.7
RDA for Calcium (mg)	267	267	400	400
RDA for Iron (mg)	2.5	2.5	3.4	3.4
RDA for Vitamin A (RE)	158	233	300	300
RDA for Vitamin C (mg)	14.6	15.0	16.7	19.2

¹ Total fat not to exceed 30 percent over a school week.

² Saturated fat to be less than 10 percent over a school week.

³ The grams of fat will vary depending on the actual level of calories offered.

Appendix M: Instructor Outline

Lesson 3: Program Requirements – NuMenus and Assisted NuMenus

Lesson Time

Approximately 2 hours

Equipment

- ✓ Slide projector
- ✓ 3 screens
- ✓ Overhead projector

Materials

- ✓ Slides
- ✓ Transparencies:
 - T-1 Cartoon: Snoopy
 - T-2 Appendix C: Standard RDA Set
 - T-3 Total Fat Goal for Grades K-6, Lunch
 - T-4 Saturated Fat Goal for Grades K-6, Lunch
 - T-5 Appendix E: Grams of Fat
 - T-6 Fat Goals for Grades K-6
 - T-7 Selecting The Right Nutrient Standard
 - T-8 Lunch Choices
 - T-9 Breakfast Choices
 - T-10 Salad Bar Choices
 - T-11 Cartoon: Sally Forth
- ✓ Activity – Appendix B: Nutrients
- ✓ Activity – Appendix E Grams of Fat
- ✓ Activity – Appendix F: Selecting Nutrient Standards
- ✓ Activity – Appendix I: Substitutions
- ✓ Activity – Appendix J: Quizzes

Lesson Plan Outline

1. Interest Building Strategy/Set
 - a) Show menus that do or do not meet the new program requirements. Ask if students can determine which do and do not. They will be able to by the end of the lesson.
2. Review Competencies.
3. Purpose
 - a) Our goal is to plan menus that meet the nutritional requirements of children. NuMenus and Assisted NuMenus menu planning systems will allow you to plan a menu with immediate feedback on how well you are meeting those requirements.
 - b) The flexibility of NuMenus and Assisted NuMenus allows you to create menus that meet the needs of your operation and your students, but still meet the nutritional requirements of children.
4. Transfer
 - a) There are specific program requirements for NuMenus and Assisted NuMenus, just as there were for the traditional meal pattern. The requirements regarding fluid milk as a beverage and foods of minimal nutritional value remain the same. We will study the NuMenus and Assisted NuMenus program requirements, reviewing those that are familiar and learning the important new program requirements.
5. Instruction
 - a) Discuss how we plan NuMenus and Assisted NuMenus with foods in any quantities. The criteria are based on the nutrient content, but the goal is to meet the nutrition goals just as with Food Based Menus.
 - b) Discuss the difference between NuMenus and Assisted NuMenus: with NuMenus, the school food authority will analyze the menus and with Assisted NuMenus, the consultant will analyze the menus.
 - c) Discuss the key points for NuMenus and Assisted NuMenus:
 - i) Nutrient Standards
 - a) Definition
 - b) Calories and Nutrients in the Standards
 - c) Establishment
 - d) Age or Grade Groups
 - e) Selection
 - f) Adults
 - ii) Weekly Averages
 - iii) Weighted Nutrient Analysis
 - iv) Combined Breakfast and Lunch
 - v) Approved Software and Database
 - vi) Nutrition Disclosure
 - vii) Standardized Recipes and Preparation Techniques
 - viii) Processed Food Analysis
 - d) Discuss NuMenus Meals:
 - i) Menu Item Definition
 - ii) Lunch Components, Including Theme Bars and Field Trips
 - iii) Breakfast Components
 - iv) Daily vs. Weekly Criteria
 - v) All Foods Count in Nutrient Analysis
 - e) Discuss Offer versus Serve in terms of the general rules, the goals, and the specific rules for NuMenus and Assisted NuMenus.
 - f) Discuss how to count menu items when choices are offered.
 - g) Discuss leftovers and substitutions and when menu planners must reanalyze a meal when they occur.
 - i) Activity – Appendix I: Substitutions
 - h) Discuss fortification issues.

Appendices

- i) Review other regulations for NuMenus.
- j) Discuss the special points that continue to be required under NuMenus:
 - i) Substitutions for disabled
 - ii) Substitutions for medical or dietary needs
 - iii) Unit pricing
 - iv) Same selection for all
 - v) Each OVS menu item different
- 6. Guided Practice
 - a) Activity – Appendix B: Nutrients
 - b) Activity – Appendix E: Grams of Fat
 - c) Activity – Appendix F: Selecting Nutrient Standards
 - d) Activity – Appendix I: Substitutions
 - e) Activity – Appendix J: Quizzes
- 7. Individual Practice
 - a) None
- 8. Closure
 - a) Show the menus from the Interest Building Strategy/Set again. Can students spot the ones that do not meet the Program Requirements?
 - b) Review competencies.
- 9. Back on the Job...
 - a) Program Requirements is an important area to cover in staff training.
- 10. Appendices
 - a) Appendix A: Recommended Dietary Allowances
 - b) Appendix B: Nutrients
 - c) Appendix C: Standard RDA Data Set
 - d) Appendix D: Determining Nutrient Standards
 - e) Appendix E: Grams of Fat
 - f) Appendix F: Selecting Nutrient Standards
 - g) Appendix G: Age to Grade Chart
 - h) Appendix H: Definition of Competitive Foods and Foods of Minimal Nutritional Value
 - i) Appendix I: Substitutions
 - j) Appendix J: Quizzes
 - k) Appendix K: Required Grade Nutrient Standards
 - l) Appendix L: Optional Age Group Nutrient Standards
 - m) Appendix M: Instructor Outline

Appendix M: Instructor Key

Grams of Fat

1. Based on a breakfast meal that contains 525 calories and is served to a 3rd grade girl, calculate the approximate number of grams of fat this breakfast could contain and still meet the goal of 30% or less calories from fat.

$$525 \times \underline{30\%} = \underline{157.5} \text{ calories from fat}$$

$$\underline{157.5} \text{ calories from fat divided by 9 calories per gram of fat}$$

$$= \underline{17.5} \text{ grams of fat}$$

2. Based on a lunch meal that contains 800 calories and is served to a 10th grade boy, calculate the approximate number of grams of saturated fat this lunch could contain and still meet the goal of 10% or less calories from saturated fat.

$$800 \times \underline{10\%} = \underline{80} \text{ calories from saturated fat}$$

$$\underline{80} \text{ calories from saturated fat divided by 9 calories per gram of fat}$$

$$= \underline{8.8} \text{ grams of saturated fat}$$

Appendix M: Instructor Key

Selecting Nutrient Standards

If the ages or grades of children in your school do not meet the preset groupings, you need to evaluate whether it is necessary to use more than one Nutrient Standard or create a modified custom Nutrient Standard for your school.

Criteria: If only one age or grade group is outside the Nutrient Standard on either end, the majority standard may be used. If ages span more than two years beyond the 10-11 age breaks, two groups must be used.

Example 1

New Town Primary School has grades K-3 and uses NuMenus. The students are 5-8 years old. Which Nutrient Standards could be used?

1. **Grades K-6**
2. **Grades K-3**
3. **Ages 3-6 and 7-11**
4. **Custom Age Groups 5-8**

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 2

Old Town Union School has grades K-12 and uses Assisted NuMenus. The students are 5-17 years old. Which Nutrient Standard could be used to evaluate the nutritional adequacy of this menu?

1. **Grades K-6 and 7-12**
2. **(4) Optional Age Groups**

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 3

Up Town Junior High has grades 6-9 and uses Assisted NuMenus. The students are 11-14 years old. Which Nutrient Standards could be used?

1. **Grades 7-12**
2. **Ages 11-13**
3. **Grades K-6 and 7-12**
4. **Custom Age Groups 11-14**

Which Nutrient Standard would best meet the nutritional needs of the group?

Example 4

Suburban Elementary School has grades K-8 and uses NuMenus. The ages of the students range from 5-13. Which Nutrient Standards could be used to evaluate the nutritional adequacy of this menu?

- 1. Grades K-6 and Grades 7-12**
- 2. Ages 3-6 and ages 11-13**
- 3. Custom Age Groups 5-10 and Optional Age Group 11-13**

Which Nutrient Standard would best meet the nutritional needs of the group?

Appendix M: Instructor Key

Substitutions

Menu planners must be able to recognize situations that would require reanalysis of the menu. Try to determine which of the situations below could result in the menu being reanalyzed.

1. The September 14th menu calls for Orange Wedges. There is a freeze in southern California and no oranges are available. Your produce purveyor calls August 30th to inform you of the need to change and you decide to use Apple Wedges. Do you need to reanalyze the menu? Why or why not?

Key: Because you know of the change prior to the two-week window, you should reanalyze the menu.

Two-week

2. On September 18th there are 20 servings of rice left over. The cook freezes the leftovers. On September 24th, the school runs out of rolls to serve with Baked Chicken. The cook reheats the leftover rice and serves it with chicken. Do you need to reanalyze the menu? Why or why not?

Key: This was an emergency substitution of a similar food. There is no need to analyze.

3. The September 29th menu calls for Beef and Bean Burritos. The delivery arrives from the distributor on September 27th. You have been shorted two cases of burritos, but they send two cases of Chicken and Bean and Cheese Quesadillas as a substitution. Do you need to reanalyze the menu? Why or why not?

Key: Because the menu planner did not know about the substitution two weeks in advance of the date of the menu, and a similar food was served, there is no need to reanalyze .

16	17	18	19	20	21	22
23	24	25	26	27	28	29

4. On October 14th, the menu calls for Peach Cobbler. The day before, the baker burns the cobbler and it must be thrown out. The manager knows there needs to be another menu item, but only has ice cream to substitute for the cobbler. Do you need to reanalyze the menu? Why or why not?

Key: The substitution occurred within the two-week window. Although the menu item substituted is not a similar food, the menu does not need to be reanalyzed.

Appendix M: Instructor Key

Quizzes

A. Reimbursable Meals

Which of these lunch meals would not meet the criteria for a reimbursable meal in NuMenus? (Whether or not 1/3 RDA criteria is being met is irrelevant for this exercise.)

1. Entree - Lasagna
Green Beans
Italian Bread
Whole Milk
2. Entree - Hamburger with Lettuce and Tomato
Skim Milk
3. Entree - Green Bean Casserole
Fruit Salad
Lowfat Milk
4. Entree - Baked Chicken
Yogurt
Skim Milk
5. Entree - Bean Burrito
Spanish Rice
Lowfat Milk

Answer: Number 2. Number 2 has only two menu items.

B. Offer versus Serve

Which of these lunch meals would not be considered a reimbursable meal under OVS in NuMenus? (Whether or not 1/3 RDA criteria is being met is irrelevant for this exercise.)

1. Entree - Steak Sandwich
Celery Sticks
French Fries
Whole Milk
The student chooses the steak sandwich and whole milk.
2. Entree - Pizza
Fresh Peach
Skim Milk
The student chooses a fresh peach and skim milk.
3. **Entree - Tacos with Lettuce and Tomato**
Fruit Cocktail
Potato Rounds
Lowfat Milk
The student chooses tacos with lettuce and tomato.
4. Entree - Chicken Nuggets
Tossed Salad
Dinner Roll
Yogurt
Whole Milk
The student chooses a dinner roll and yogurt.
5. Entree - Cheddar Cheese Nachos

Chicken Enchilada

Skim Milk

The student chooses nachos and an enchilada.

Answer: Numbers 2, 3 and 4. In numbers 2 and 4, the student did not choose an entree and in number 3, the student chose only one menu item.

C. Special Points

Answer the questions below, giving the rationale for your answer.

1. The mother of a disabled student sends a note to school asking the Cafeteria Manager to substitute all fresh fruits and vegetables with canned fruits only. Should the manager make the substitutions.

Answer: This substitution should not be made. There is not a statement signed by a physician.

2. A statement signed by a local pediatrician is sent to the Child Nutrition Program director asking that all of his patients be given fruit juice instead of milk. Should the director make the substitution for John Smith at Fair Oaks Elementary who says he is a patient of this doctor? Why?

Answer: This substitution should not be made. Exceptions may only be made on a case-by-case basis.

3. The cashier charges Sue Jones only \$1.25 for her Grilled Cheese and apple because she did not take the Milk and Pasta Salad that was also offered for the full meal price of \$1.75. Is this correct? Why?

Answer: No. A lunch or breakfast must be priced as a unit. Offer versus Serve must not affect the price.

4. The Child Nutrition Program director offers a "Coaches Corner" lunch at the high school with larger portions. Even though the price to paying students is 25¢ more, he lets free and reduced-price students select this meal, too. Is this correct? Why?

Answer: Yes. All children must be offered the same selection.

5. Tim Brown is not feeling well and selects two milks for lunch at Fair Oaks Elementary School which has Offer versus Serve. Does this meal meet the criteria for a reimbursable meal? Why?

Answer: An entree must be selected in addition to another item. Only one of the selected milks can contribute toward the reimbursable meal.

D. Leftovers and Substitutions

Which of the following leftover substitutions can be made without significantly affecting the nutrient analysis of the menu that the leftover will be included in?

1. Leftover: Lasagna
Menu Item the Leftover is substituting for: Green Peas
2. Leftover: Fresh Orange
Menu Item the Leftover is substituting for: Steamed Broccoli
3. Leftover: Cherry Crisp
Menu Item the Leftover is substituting for: Sponge Cake
4. Leftover: Baked Potato
Menu Item the Leftover is substituting for: Egg Noodle
5. Leftover: Banana Bread
Menu Item the Leftover is substituting for: Spanish Rice

Answer : Leftovers 2 and 3 can be substituted without significantly affecting the nutrient analysis of the menu that the leftover will be included in. The substitution in 5 may not be an appropriate one but Banana Bread is similar in nutrients to the Spanish Rice and, therefore, does not require the nutrient analysis to be recalculated.

E. Competitive Foods (Foods of Minimal Nutritional Value)

Which of these foods are considered as “foods of minimal nutritional value” and cannot be used as part of a nutrient analysis in NuMenus?

- 1. Cotton candy**
2. Candy corn in a Halloween trail mix
3. Chocolate candy bar with nuts
- 4. Root Beer flavored carbonated soda**
5. Ice cream sandwich
6. Granola bar
7. Miniature marshmallows used as garnish for chocolate pudding
8. Orange flavored soda which meets 10% of the USRDA for vitamin C (vitamin C content verified by FCS under petition of vendor)
- 9. 100% Honey candy stick**
- 10. Cherry licorice**

Answer: Foods 1, 4, 9 and 10.

Although the candy corn in the Halloween trail mix (Number 2) and the marshmallows on top of the chocolate pudding (Number 7) are included in the competitive foods list, they can be used in a nutrient analysis in NuMenus because they are part of a reimbursable meal menu item (they are not sold separately from the meal as competitive foods).

T-1

Peanuts



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T-3

Total Fat Goal for Grades K-6

$$\begin{aligned} & 664 \text{ calories} \times 30\% \\ & = 199 \text{ calories maximum from fat.} \end{aligned}$$

$$\begin{aligned} & 199 \text{ calories from fat divided by } 9 \\ & \text{(9 calories per gram of fat)} \\ & = 22 \text{ grams of fat.} \end{aligned}$$

T-4

Saturated Fat Goal for Grades K-6

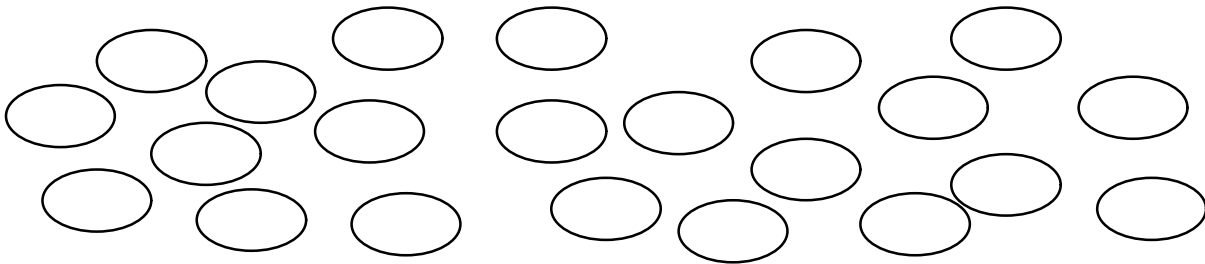
$$\begin{aligned} & 664 \text{ calories} \times 10\% \\ & = 66 \text{ calories maximum from saturated fat.} \end{aligned}$$

$$\begin{aligned} & 66 \text{ calories from saturated fat divided by} \\ & \quad 9 \\ & \quad (9 \text{ calories per gram of fat}) \\ & = 7 \text{ grams of saturated fat.} \end{aligned}$$

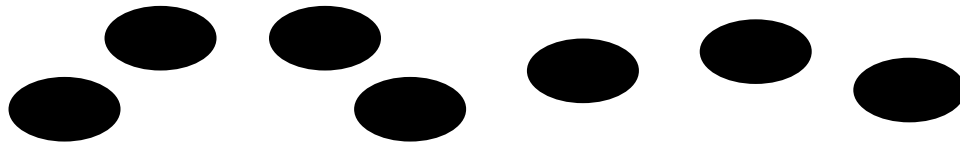
T-6

Fat Goals for Grades K-6

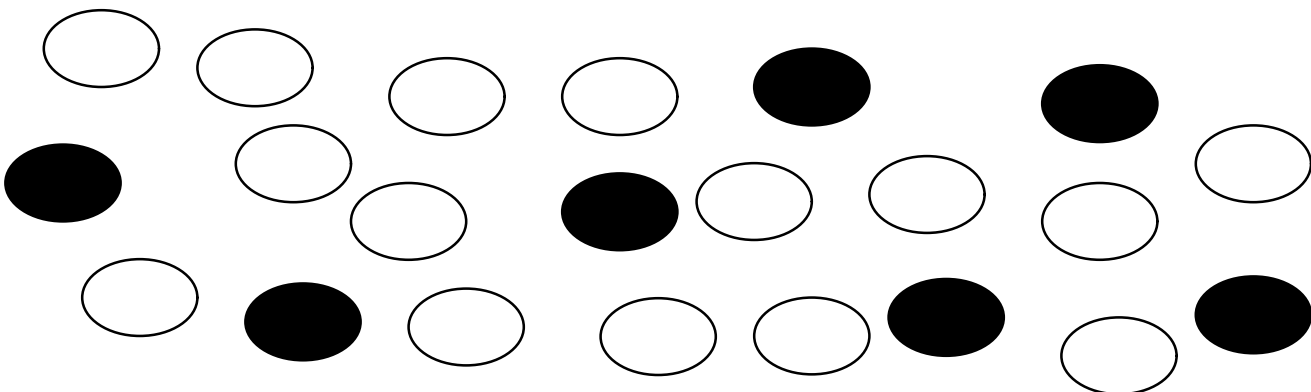
30% of calories from total fat
= 22 grams



10% of calories from saturated fat
= 7 grams



The 7 grams of saturated fat are a part of
the 22 grams of total fat.



T-8

Lunch Choices

Select One Entree:

- Hamburger on a Bun
- Baked Chicken with Whole Grain Roll
- Bean Burrito with Salsa

Select Two Side Dishes:

- Lettuce, Tomato, Pickle
- Green Salad with Lowfat Dressing
- Watermelon Wedge
- Peach Crisp
- Seasoned Peas
- Oven Baked French Fries

Select One Milk:

- Nonfat Milk
- Nonfat Chocolate Milk
- 1% Lowfat Milk
- Whole Milk

Note: There are four menu items.

T-9

Breakfast Choices

Select One

- / Corn Flakes
- / Cinnamon Life
- / Cheerios
- / Oatmeal
- / Cream of Wheat

Select One

- / Toast & Jelly
- / Mini Muffin

Select One

- / Banana
- / Applesauce
- / Orange Juice

Select One

- / Nonfat Milk
- / 1% Lowfat Milk
- / Whole Milk

Note: There are four menu items.

T-10

Salad Bar Choices

Select One Or More

- / Egg Salad
- / 3-Bean Salad
- / Diced Ham & Cheese
- / Peanut Butter
- / Macaroni Salad

Select One Or More

- / Lettuce
- / Spinach
- / Tomatoes
- / Onions
- / Sliced Cucumbers
- / Watermelon Wedge
- / Pineapple Tidbits

Select One Or More

- / Crackers
- / Croutons
- / Roll

Select One

- / Nonfat Milk
- / 1 % Lowfat Milk
- / 1 % Chocolate Milk
- / Whole Milk

Note: There are four menu items

T-11

Sally Forth



MY TEACHER ASKED ME TO NAME THE FOUR BASIC FOOD GROUPS, BUT I COULD ONLY THINK OF TWO... FISH STICKS AND FROZEN PIZZA



Lesson 3: Program Requirements – NuMenus and Assisted NuMenus

Competencies

Participants will be able to:

1. Recognize a reimbursable breakfast and lunch based on the daily and weekly criteria.
2. Identify food items which do and do not meet the criteria of a single menu item as a part of a reimbursable meal in NuMenus.
3. Recognize a reimbursable breakfast and lunch when Offer versus Serve (OVS) is implemented.
4. Recognize foods of minimal nutritional value and when they should or should not be included in the nutrient analysis of a meal.

